# Attachment Q

# **Carpet Installation Specifications** (GRC Internal Guidelines)

# Carpet Installation Specifications (GRC Internal Guidelines)

The JSC supports NASA GRC with fulfilling many small carpet replacement requests and, on occasion, some large requests. Most large requests, however, will not be performed under the JSC, but are performed in conjunction with other rehab. work handled through GRC's maintenance and engineering contract administered by the Facilities Division.

From February 2001 through May 2003, GRC installed approximately 2,641 SY of carpeting through the JSC. Based on historical data, GRC has developed some standards for procurement and installation of carpeting. The following data shall be considered when fulfilling carpet requests.

#### Carpeting

- Optimum ounce weight of carpet should range between 26 oz. to 30 oz. depending upon the
  application. On occasion, a customer may specify an ounce weight outside this range. For
  instance, some lower ounce weights have been used in light traffic areas, and some heavy weights
  have been used for a special request.
- Stitches per inch should average approximately 10 per inch but can vary with carpet type.
- Construction shall be similar to a Unibond or Thermobond, depending upon application (broad loom vs modular).
- GRC has a preference for and history of using Lee's manufactured carpeting due to its reputation
  for wearability, availability and warranty. The Contractor shall ensure that the following features,
  which are taken from or should be modeled after Lee's manufactured carpeting, are included in
  selected carpeting.
  - Carpet shall be a tufted, textured loop.
  - The face yarn should have a soil protection like DuPont Antron Legacy.
  - The yarn must be dyed with a technique similar to Duracolor.
- Note that in most GRC installations, GRC has approved a Lee's Lineage, Attribute or Discovery style carpeting, to name a few. Lee's offers a low, medium and high end carpet style to choose from.
- In most installations, broadloom should be no less than 12' in width.
- All carpeting must have at a minimum, flammability and smoke chamber protection characteristics.
- Carpeting should be warrantied for wearability, static reduction and edge ravel, delamination and tuft bind protection.
- Seams shall be sealed per manufacturer's recommendation.
- In some applications, advance seam layout may be required before installation, to ensure best value in conjunction with optimum layout. The direction of carpeting shall be maintained wherever possible.

#### Glue

- Glue should have a low odor output.
- Glue shall meet carpet manufacturer's recommendations.
- Glue shall be applied in accordance with manufacturer's recommendation to ensure compliance with warranties.

#### Base

- Wall base shall be of rubber or vinyl construction and preferably manufactured by Roppe.
- Base shall be cove style in almost all applications.
- Size of cove base shall be 4" toe profile with a 1/8" gauge thickness.
- Color in most applications shall be "Fawn" or a similar neutral color as specified by COTR or customer.

# Computer floors

- Most computer floor applications require a modular carpet square system. Installers shall attempt to avoid additional glue application wherever possible when recarpeting on computer floors.
- Some applications, where systems furniture exists and the breakdown, movement and reassembly of the systems furniture shall be cost prohibitive, the Contractor may be required to arrange for and cost out the use of a "lift system" to lift the systems furniture to accommodate carpet square installation below.

#### Demo.

- Old carpet shall be cut and removed in strips with an average width of 6" to reduce or eliminate the chance of "lifting" any tile below.
- Any asbestos tile which is lifted "intact" or with a single break may be carefully placed back
  down. If a tile breaks or crumbles the work shall be stopped and the COTR shall be notified.
  Under no condition shall the Contractor remove tile in such a way as to chip or abrade asbestos
  tile which would create a "friable" condition. See additional information on asbestos handling in
  Attachment O.
- All old carpeting which has been removed may be disposed of into GRC dumpsters.
- The Contractor shall cleanup after any demo. (and installation) work to remove all scraps, empty all trash receptacles and remove any smudges from base, walls, etc.

# Installation & Scheduling

- Scheduling for demo. and installation shall take into consideration the current occupancy of an area. Whenever possible, demo. and installation shall be performed on second shift, after occupants have left for the day. However, some areas which test during second shift or are unoccupied during the first shift may allow for first shift installation.
- It is important that the Contractor ensure that carpet quotes from subcontractors fall within required turnaround times for IDIQ requests, and that carpeting can be acquired and installed within a reasonable time period wherever possible. The selection of any subcontractor should be based on their ability to select from carpeting which is generally "in stock" and can be shipped promptly for installation. Although availability is not always "a given", history indicates that most Lee's Lineage brand carpeting is "in stock" in most colors and can be shipped and installed within a few weeks.
- The Contractor shall try to ensure compatibility of carpet manufacturer and style with areas/rooms which are adjacent or surrounding the target area. For instance, if Lee's Discovery carpet is used in most rooms, then Lee's Discovery shall be quoted on.
- Color selection will be made by the COTR, sometimes in conjunction with the customer.

## **Furniture Movement**

- Furniture may or may not exist in target location. When furniture exists, the Contractor shall price out and plan for furniture movement in conjunction with carpet installation jobs.
- Care shall be taken when moving all furniture to avoid any damage to furniture or building structure.
- When furniture is placed in the hallway or to one side of a room, it shall be placed to ensure a 3' wide aisle for egress.
- When the furniture is moved to a temporary location, it shall be carefully stored to avoid an unsafe falling or tripping problem.
- Movers shall follow acceptable back safety procedures.
- Furniture shall be placed back in the exact same location from which it was removed. It is suggested that if a diagram does not already exist from the room occupant, that the movers draw one.
- Furniture movers shall not disconnect or move ADP equipment. This is the responsibility of the building/room occupant and their organization.
- The Contractor shall recommend to the customer to empty any 2-door storage cabinets, desks (which may be tipped during removal from room), bookcases and pack all loose and personal belongings prior to installation.

## Cost estimates

- The Contractor shall endeavor to get 3 competitive quotes where possible. Selection shall be based on best value (cost, availability and scheduling). If prompt, competitive quotes are unavailable or are consistently a challenge, the Contractor may consider continued use of one specific, reliable subcontractor.
- The Contractor shall ensure that quotes are based on accurate measurements for the target area.
- Cost estimates for old demo. and new carpeting shall be per square yard, where appropriate, and wall base by linear feet. Number of transition strips shall be listed, where necessary.
- Estimates shall include the following information and be priced out separately in a format like or similar to the format used below. Estimates shall reference availability whenever possible.

Mfg.: Lee's; Style: Lineage; Color		
to be chosen	30 SY @ \$XX.XX/SY =	\$XXX.XX
Vinyl wall base; 4" toe profile;		
Mfg.: Roppe	70 LF @ \$X.XX/LF =	\$XXX.XX
Furniture management, if		
applicable*	\$XXX.XX	\$XXX.XX
Carpet removal (demo.)	30 SY @ \$X.XX/SY =	\$XX.XX
Door transition strip(s)	3 EA @ \$X.XX =	\$X.XX
TOTAL		\$X,XXX.XX

<sup>\*</sup>If the customer moves furniture out themselves or vacates the area prior to installation, this amount shall be deducted from the total. The Contractor shall be informed prior to scheduling.

- All cost estimates shall be all inclusive (i.e., labor, overhead, materials). A customer will be funding the IDIQ request based on this cost.
- Pricing for furniture management shall be consistent for all jobs.
- On occasion, the Contractor shall be required to price out 2 or more types of carpeting to choose from.
- It is recommended that the Contractor establish a list of carpet styles with respective prices from which to reference for the duration of the contract.

## Additional requirements

- The Contractor shall endeavor to consistently use the same installation crew who are reliable, trustworthy and experienced in GRC Security regulations, carpet installation and demo.
   requirements.
- When the Contractor recognizes that related problems exist which require additional preparations or arrangements by the Gov't, the Contractor shall bring this to the attention of the COTR. For example, if a carpet installation job will involve a carpeting height which will compromise the use of a door, advance preparations to trim the door may be required on the part of the Gov't.
- Upon the scheduling of carpet jobs with the requesting customer, the Contractor shall inquire on and make arrangements for access into the target area. Where special considerations are required by the customer (required escort, etc.), the Contractor shall notify the COTR. The Contractor shall notify the COTR of any after hours or weekend installation jobs so that advance notification can be made to Security and the Building Manager.
- Some carpeting installation jobs must be coordinated with additional rehab. work such as painting.
   When notified, the Contractor is responsible for schedule coordination of carpet work with maintenance on-site contractor.
- All subcontractors shall be trained in GRC safety and environmental requirements, and provided with a list of emergency phone contacts prior to any work.